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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,482	08/27/2007	Leif Gustavsson	OHLIN.006NP	7213

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EXAMINER	
MEYER, KATY E	

ART UNIT	PAPER NUMBER
3618	

NOTIFICATION DATE	DELIVERY MODE
12/08/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/596,482	GUSTAVSSON, LEIF	
	Examiner	Art Unit	
	KATY MEYER	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed September 17, 2010 have been fully considered but they are not persuasive.

Applicant argues that Ward et al. do not disclose a temperature-sensitive member which connects and disconnects a duct *in proportion to* the temperature of a fluid. However, in column 2, lines 30 – 50, Ward et al. explain that the extent of opening of the outlet ports is determined by the position of a piston (16). The piston is moved by an expandable thermostatic element, which expands in response to temperature changes in the fluid. Only at an extremely high temperature is one outlet port completely sealed. Ohshita et al. meet all the limitations of the claimed invention, but lack only a temperature-sensitive unit. It would have been obvious to modify the bridging unit taught by Ohshita et al. to be temperature-sensitive as taught by Ward (rather than pressure-sensitive) to ensure that the system does not overheat, thus preventing potential damage. One need only substitute the temperature-sensitive element (18) taught by Ward et al. for the pressure-sensitive element (46) in the bridging duct taught by Ohshita et al. to arrive at applicant's invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita et al. (US 5,872,428) in view of Ward et al. (US 3,770,076).

As for claim 1, Ohshita et al. disclose a device for use in a vehicle for transmitting a drive force from at least one first wheel (17) to at least one second wheel (22) with a hydrostatic transmission arrangement, the hydrostatic transmission arrangement comprising: a hydrostatic pump (31), the first wheel and the hydrostatic pump being drivingly connected; a hydrostatic drive assembly (36) connected to the pump by a hydrostatic line system (Fig. 3), the hydrostatic drive assembly being drivingly connected to the second wheel; and one or more members positioned along the hydrostatic line system, the one or more members (46, 47) being adapted to wholly or partially bridge or disconnect or reconnect the hydrostatic drive assembly.

Ohshita et al. do not disclose a unit that controls the bridging duct based on temperature. Ward et al. teach a hydrostatic drive assembly having a unit (11) provided with temperature sensitive members and members that connect and disconnect a bridging duct based on the temperature of the fluid (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system taught by Ohshita et al. to include the temperature-sensitive unit taught by Ward et al. to prevent overheating of the fluid, which may result in damage or underperformance of the system.

Ohshita et al. further disclose a flow and pressure regulating valve controlled by a mechanical member (see 46). Said regulator (46) produces a variation in the medium

moving through the hydrostatic line system. The assembly may be operated in a first state (rear wheel drive) and a second state (all wheel drive).

Ward et al. further disclose: a first body (18) comprising a fluid, and a second body (14) which may be made of metal, said bodies having different thermal expansion coefficients and move relative to one another. A cone (18) is associated with a seat (16).

As for claim 7, Ward et al. teach that the temperature setting of the thermostatic element (18) may be adjusted. Applicant suggests using a conventional hydraulic oil as the fluid, therefore one of ordinary skill in the art would have known to adjust the thermostatic element to operate in the range of 80 - 105 degrees Celsius.

As for claim 8, 17, and 18, since the valve (Fig. 2) taught by Ward et al. is infinitely adjustable between extreme positions, it is capable of causing change of less than 3% in the flow and 1% in the pressure of the medium.

As for claim 9, one of ordinary skill in the art would have known to minimize the time delay to ensure quick response to the operator's demands.

Applicant has provided no explanation of the relevance or criticality of the values provided for temperature range, pressure drop, and time delay. It would have been within the general skill of a worker in the art to determine safe levels of temperature and pressure, and adjust the system to operate within the claimed ranges.

As for claim 11, Ohshita et al. and Ward et al. meet all the limitations of the claimed invention, as noted above with respect to claim 1. Ohshita et al. further disclose a high pressure line (43) and a low pressure line (45), and a pressure relief

valve (46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Ohshita et al. to include both the pressure relief valve and the temperature-sensitive variable flow controller taught by Ward et al. to effectively protect against dangerous pressure and temperature levels.

Ward et al. further disclose: a thermostat (18) comprising a movable component and a seat (see 16). The thermostat comprises a sleeve and a fluid (wax) that expands as the temperature of the hydrostatic fluid increases.

Ohshita et al. further disclose a flow and pressure regulating valve controlled by a mechanical member (see 46). The high pressure line and the low pressure line extend though a single body (the vehicle body) which contains the variable flow controller and a portion of the hydrostatic drive assembly.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATY MEYER whose telephone number is (571)272-5830. The examiner can normally be reached on Monday - Thursday, 8:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver can be reached on 571-272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. M./
Examiner, Art Unit 3618

/J. ALLEN SHRIVER II/
Supervisory Patent Examiner, Art Unit 3618